Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Arrangement on a semiconductor chip for calibrating a temperature setting curve having

a signal generation unit for providing a first signal, which is proportional to an actual temperature of the chip, whereby a signal offset is creatable by the signal generation unit, which is combined with the first signal to define a second signal; and

a temperature extraction unit receiving the first signal and the second signal for calculating a first temperature point based on the first signal and for calculating a second temperature point based on the second signal, wherein the second temperature point is a virtual temperature point and wherein the first and second temperature points are different from each other, wherein the second temperature point does not exist in the semiconductor chip during calibration of the temperature setting curve.

2. (original) Arrangement as claimed in claim 1, whereby the first signal, which is proportional to the actual temperature of the chip, is a current, a voltage or a frequency.

3. (original) Arrangement as claimed in claim 1, whereby the first signal and the second signal are convertible into digital signals, whereby the temperature extraction unit calculates the first and second temperature points for calibrating the temperature setting curve.

4. (currently amended) Method for calibrating a temperature setting curve of a temperature sensor arrangement on a semiconductor chip, the method comprising:

reading a first signal, which is proportional to an actual temperature of the semiconductor chip;

generating a signal offset, which is combined with the first signal to define a second signal;

extracting a first actual temperature from the first signal and a second virtual temperature from the second signal, wherein the first actual temperature and the second virtual temperature are different from each other and wherein the second virtual temperature does not exist on the semiconductor chip during calibration of the temperature setting curve; and

calibrating a temperature setting curve of the semiconductor chip using the first actual temperature and the second virtual temperature.

5. (previously presented) Method as claimed in claim 4, whereby the first actual temperature and the second virtual temperature are used for providing calibration parameters to the semiconductor chip.

6. (original) Method as claimed in claim 5, whereby calculating calibration parameters can be performed on-chip or off-chip.

7. (previously presented) Method as claimed in claim 4, whereby additional signal offsets are provided for calculating more than two temperature points and calibrating the temperature setting curve.

8. (previously presented) Method as claimed in claim 1, whereby the signal offset is subtracted from the first signal or added to the first signal defining the second signal, which is provided to the temperature extraction unit.

9. (canceled)

10. (canceled)

11. (previously presented) The arrangement as claimed in claim 1 wherein the temperature extraction unit calibrates a temperature setting curve using the first

temperature point and the second virtual temperature point, both of which are a function of the actual temperature.

12. (previously presented) The arrangement as claimed in claim 1 wherein the temperature setting curve is calibrated using only a single actual temperature point, where the single actual temperature point represents an actual temperature of the chip.

13. (previously presented) The method as claimed in claim 4 wherein the temperature setting curve is calibrated using only a single actual temperature point, where the single actual temperature point represents an actual temperature of the chip.